#### Marine Life Protection Act Initiative



### Master Plan Science Advisory Team (SAT) Activities

Presentation to the MLPA Blue Ribbon Task Force and the California Fish and Game Commission February 13, 2008 • Pacifica, CA

Mary Gleason, Principal Planner, MLPA Initiative



### **SAT Meetings**

- June 26, 2007
- August 16, 2007
- September 17, 2007 (via conference call)
- October 1, 2007
- November 13, 2007
- November 29, 2007 (via conference call)
- January 8, 2008
- January 23, 2008



### **Recent/Upcoming Meetings**

- January 8 Parallel Processes (modeling)
   Approaches to complement SAT evaluation of marine protected area (MPA) proposals
- January 23 SAT evaluation of "second round" draft MPA proposals
- April 3 SAT evaluation of "third round" MPA proposals



### **SAT Guidance to the NCCRSG**

- Responses to science questions
  - 37 questions since August
  - Range of topics: birds/mammals, water quality, shorefishing "ribbon", etc.
- Attendance at North Central Coast Regional Stakeholder Group meetings
  - Presentations on marine ecosystems and habitats, seabirds and marine mammals, oceanography, fish biology, ecology and ecosystem interactions
  - Presentations on evaluation methods and results



## **SAT Evaluations of Proposals**

- Habitat Representation (MLPA goals 1 and 4)
- Size and Spacing (MLPA goals 2 and 6)



### **Second Round Evaluations**

- Habitat Representation (MLPA goals 1 and 4)
- Size and Spacing (MLPA goals 2 and 6)
- NEW Marine Birds and Mammals (MLPA Goal 2)



### **Levels of Protection**

- Levels of Protection ("LOPs") are determined by the SAT, based on proposed regulations (allowed extractive activities)
- LOPs affect how MPAs are grouped in evaluations
- Most LOPs assigned in November to different extractive activities were confirmed on January 23.



# **LOP for Salmon Trolling**

- LOP for one activity, salmon trolling, was discussed in detail
- Different LOPs based on how salmon are extracted. In previous evaluations:
  - Salmon trolling < 50 meters = Moderate-High LOP</p>
  - Salmon trolling > 50 meters = High LOP
- Does salmon trolling in < 50 meters result in greater ecosystem impacts than >50 meters?
- Results of 2005 Benthic-Pelagic Linkages Workshop;
   50 meter threshold identified



# **LOP for Salmon Trolling (<50m)**

- Logbook data submitted by fishermen during MLPA process suggests very limited associated catch of rockfish during salmon trolling in MLPA North Central Coast Study Region; limited data on associated catch from California Department of Fish and Game
- SAT members have differing perspectives on whether existing data is sufficient to determine impacts at local level of MPA
- SAT voted (7 in favor, 4 opposed) to rank salmon trolling <50 meters depth somewhere between high and moderate-high LOP



### **Next Steps**

- Fine-tuning evaluation methodology
- Parallel processes group working to make model results more easily understood
- Preparing for third round of evaluations



### **Parallel Processes Workgroup**

- Initially 5 modeling efforts developed to complement SAT evaluations
- SAT has focused on two similar models
  - Equilibrium Delay-difference Optimization Model (Costello, Walters, Hilborn)
  - Population Sustainability and Yield Model (Botsford)
- Provide comparison between draft proposals on potential contribution to population sustainability of selected targeted fish/invertebrate species
- Group working to make results more "digestible"